



**State of New Hampshire  
DEPARTMENT OF ENVIRONMENTAL SERVICES**

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095  
(603) 271-2900 FAX (603) 271-2456



October 7, 2002

**CERTIFIED MAIL  
RETURN RECEIPT REQUIRED**

Anthony Tirollo, President  
Technical Research and Manufacturing, Inc  
280 South River Road  
Bedford, New Hampshire 03310

**RE: Technical Research and Manufacturing, Inc.  
7 Sunset Lane, Bedford, New Hampshire  
EPA ID No. NHD500008107**

Dear Mr. Tirollo

Enclosed is Administrative Order No. WMD 02-01 issued this date to Technical Research and Manufacturing, Inc. as a result of inspections conducted on September 26, 2002, February 20, 2002 and February 22, 2001 at your 7 Sunset Lane, Bedford, New Hampshire facility.

An Administrative Order ("AO") is a formal enforcement action that serves to introduce the statute, identify the parties, document facts, determine violations, order compliance within specific time periods, and provide notice of the right of appeal.

Although the enclosed AO is very explicit on what your violations are and what must happen to correct them, we have enclosed copies of the completed Hazardous Waste Generator RCRA Inspection Checklists to assist you in assessing the violations documented at your facility at the time of the inspections. The checklists may also be of value to you for use in determining future compliance with the New Hampshire Hazardous Waste Rules.

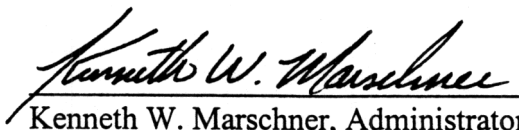
As a service to New Hampshire's hazardous waste generators, we currently maintain a Hazardous Waste Assistance Hotline which is available for you to contact our knowledgeable staff of hazardous waste inspectors. Our hazardous waste staff members are available to answer your questions concerning the New Hampshire Hazardous Waste Rules and the compliance issues which affect your hazardous waste management program, including the administrative plans and documents required under the Hazardous Waste Rules. The technical assistance available through the Hotline includes fact sheets that pertain to the management and recycling of specific wastes, summary sheets on specific sections of the Hazardous Waste Rules, copies of EPA and New Hampshire hazardous waste policy or regulatory

Anthony Tirollo  
Technical Research and Manufacturing, Inc.  
Page 2

interpretation letters that may benefit your operation, and networks with other state or federal agencies to answer your questions on a national level. The Hotline is available Monday through Friday, 8:00 AM to 4:00 PM at 271-2942.

Should you have any questions regarding this AO, please contact the lead inspector, Tod G. Leedberg, or John J. Duclos, Supervisor of the Hazardous Waste Compliance Section, at 271-2942. Thank you for your cooperation.

Sincerely,

  
Kenneth W. Marschner, Administrator  
Waste Management Programs  
Waste Management Division

CERTIFIED MAIL RRR# 7099 3400 0002 9774 2317

cc: DB/RCRA/ORDER/ARCHIVE  
Gretchen Rule, Esq., Administrator, DES Legal Unit  
Public Information Coordinator, DES  
Town Clerk, Town of Bedford, NH  
Jennifer Patterson, Esq., Senior Assistant Attorney General, NHDOJ-OAG  
Michael May, Safety Officer/System Support Coordinator

e-mail: JJD

Enclosure



**State of New Hampshire**  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095  
(603) 271-2900 FAX (603) 271-2456



Technical Research and Manufacturing, Inc.  
280 South River Road  
Bedford, New Hampshire 03110

RE: Technical Research and Manufacturing, Inc.  
7 Sunset Lane, Bedford, NH  
EPA ID No. NHD500008107

**ADMINISTRATIVE ORDER**  
**No. WMD 02-01**

**October 7, 2002**

**A. INTRODUCTION**

This Administrative Order is issued by the Department of Environmental Services, Waste Management Division to Technical Research and Manufacturing, Inc. pursuant to RSA 147-A:14. This Order is effective upon issuance.

**B. PARTIES**

1. The Department of Environmental Services, Waste Management Division ("DES"), is a duly constituted administrative agency of the State of New Hampshire, having its principal offices at 6 Hazen Drive, Concord, NH 03301.
2. Technical Research and Manufacturing, Inc. ("TRM") is a New Hampshire corporation that registered with the New Hampshire Secretary of State's Office on June 22, 1970. TRM has a mailing address of 280 South River Road, Bedford, NH, 03110, and operates a facility located at 7 Sunset Lane, Bedford, NH.

**C. STATEMENT OF FACTS AND LAW**

1. RSA 147-A authorizes DES to regulate the management, including storage, treatment, containerization, transportation, and disposal of hazardous wastes. Pursuant to RSA 147-A:3, the Commissioner of DES has adopted New Hampshire Administrative Rules Env-Wm 100-1100 ("Hazardous Waste Rules") to implement this program.
2. TRM is a hazardous waste generator that notified the United States Environmental Protection Agency ("EPA") of its activities through DES on February 17, 1995. EPA Identification Number NHD500008107 was assigned to TRM's site located at 7 Sunset Lane, Bedford, NH (the "Facility").

3. On September 26, 2002, February 20, 2002, and February 22, 2001, DES personnel conducted inspections (the "Inspections") of the Facility. The purpose of the Inspections was to determine TRM's compliance status relative to RSA 147-A and the Hazardous Waste Rules.
4. During the Inspections, DES personnel observed and documented a basement located beneath the Facility and a garage attached to the Facility being used as hazardous waste storage areas.
5. Env-Wm 502.01 requires a generator of a waste to determine if the waste is a hazardous waste.
6. During the Inspections, DES personnel observed the following in regards to hazardous waste determinations:
  - a. A tank in the basement marked as "F002/F003 hazardous waste". DES personnel also observed that documents listed the contents of the tank "Waste Ferric Chloride Solution" with a waste number of D002. During the Inspections, TRM personnel informed DES personnel that this tank collects etching rinsewater as well as general rinsewaters. TRM personnel also informed DES personnel that photoresist is removed from printed circuit boards with a methylene chloride containing photoresist stripper, and boards are rinsed in a sink that discharges to the tank in the basement. In addition, hydrochloric acid cleaner, developer, and electroless tin bath solution are discharged through piping to the tank in the basement approximately once every 6 months. To date TRM has not performed a current, complete hazardous waste determination on the tank contents.
  - b. The melted remains of a 10-gallon plastic tank located in the garage. TRM personnel informed DES personnel that the tank had contained a sodium hydroxide solution and was used for etching aluminum in the basement. Approximately two weeks prior to the September 26, 2002 Inspection, the heater for this tank failed over the weekend which evaporated the sodium hydroxide solution and caused a fire which melted the tank. TRM has not performed a hazardous waste determination on the melted remains of the tank.
7. Env-Wm 504.02(d) requires generators of hazardous waste to subsequently notify DES of any changes to the information provided in their initial notification form.
8. At the time of the Inspections, TRM had notified DES as a generator of non-regulated material (wastewater) only. A review of the Facility's hazardous waste generator activity for calendar year 2000 revealed that this facility shipped off-site 28,888 pounds of hazardous waste (*i.e.*, Waste Ferric Chloride Solution with a waste number of D002). Based on the quantities of hazardous waste that have been manifested, the Facility is classified as a Full Quantity Generator of greater than 1,000 kilograms per month of hazardous waste. At the time of the Inspections, DES had not received a subsequent notification form for this change in generator status.
9. Env-Wm 507.01(a)(3) requires hazardous waste to be placed in containers or tanks that are closed at all times except to add or remove waste.

10. During the Inspections, DES personnel observed a total of twelve (12) containers and six (6) tanks of hazardous waste that were not closed. See the attached Hazardous Waste Container Inventories ("Inventories").

11. Env-Wm 507.02(a) requires that hazardous waste that is generated, and accumulated on-site without a permit, must be shipped off-site within 90 days of the date when accumulation first began, except as provided in Env-Wm 508.02, Env-Wm 508.03, and Env-Wm 509.03.

12. During the February 22, 2001 Inspection, DES personnel observed one (1) 55-gallon container marked "Hazardous waste – Ferric chloride solution" had a marked date of accumulation of "6/21/99" (612 days), and one (1) 55-gallon container marked "Hazardous waste – Ferric chloride solution" had a marked date of accumulation of "3/21/00" (338 days). During the February 20, 2002 Inspection, DES personnel observed the container marked "Hazardous waste – Ferric chloride solution" with a marked date of accumulation of "6/21/99" was still on-site due, according to TRM personnel, to no bung being available to fit the container to ship the container off-site and no drum pump on-site to transfer the contents to another container.

13. Env-Wm 507.03(a)(1)a. requires containers and tanks to be marked with the beginning accumulation date when they are first used to store hazardous waste.

14. During the Inspections, DES personnel observed a total of seventeen (17) containers and six (6) tanks of hazardous waste that were not marked with the beginning accumulation date (see the attached Inventories).

15. Env-Wm 507.03(a)(1)b., c., and d. require containers and tanks used for the storage of hazardous waste to be clearly marked with the words "hazardous waste", words that identify the contents of the container, and the EPA or state waste number.

16. During the Inspections, DES personnel observed a total of sixteen (16) containers of hazardous waste that were not marked with the words "hazardous waste", nineteen (19) containers of hazardous waste that were not marked with words that identify the contents of the container, and seventeen (17) containers of hazardous waste that were not marked with the EPA or state waste number (see the attached Inventories).

17. Env-Wm 509.02(a)(1), which references 40 CFR Part 265.15, General Inspection Requirements, requires full quantity generators to conduct inspections of the Facility, including the hazardous waste storage areas, and to document the inspections.

18. At the time of the Inspections, TRM was not conducting and documenting inspections of the hazardous waste storage areas.

19. Env-Wm 509.02(a)(2), which references 40 CFR Part 265.16, Personnel Training, requires full quantity generators to maintain a personnel training program for its employees responsible for handling hazardous waste.

20. At the time of the Inspections, TRM did not have a personnel training program available for review and was not providing hazardous waste training to employees responsible for handling hazardous waste.

21. Env-Wm 509.02(a)(4), which references 40 CFR Part 265, Subpart C, Preparedness and Prevention, requires that full quantity generators must be prepared to minimize the possibility of a fire, explosion, or any release of hazardous waste or hazardous waste constituents to the environment which could threaten human health or the environment, by, among other items, maintaining aisle space at hazardous waste storage areas. "Required aisle space" means not less than 2 feet to allow for inspection of at least one side of each container.
22. During the Inspections, DES personnel observed that TRM was not maintaining the required aisle space at the garage hazardous waste storage area.
23. Env-Wm 509.02(a)(5), which references 40 CFR Part 265, Subpart D, Contingency Plan and Emergency Procedures, requires full quantity generators to maintain a contingency plan designed to minimize hazards to human health or the environment from fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water.
24. At the time of the Inspections, TRM did not have a formal hazardous waste contingency plan. A document titled "Emergency Response Procedure" was available, which addressed a portion of the requirements for a contingency plan.
25. Env-Wm 509.02(a)(7), which references 40 CFR Part 265, Subpart J, Tanks, requires full quantity generators, using tanks to accumulate or treat hazardous waste, to comply with certain tank standards, including but not limited to, conducting and documenting daily inspections of the tank system, and having in place spill prevention controls and overfill protection controls.
26. At the time of the Inspections, TRM was not conducting and documenting inspections of the tank in the basement marked as "F002/F003 hazardous waste", and did not have spill prevention controls and overfill prevention controls in place. At the time of the February 20, 2002 inspection, TRM provided a "Waste Storage Tank Log" with the last entry recorded as "1/29".
27. Env-Wm 509.02(b) requires a list of the steps to take in the event of an emergency and emergency numbers to be posted at the telephone nearest to each hazardous waste storage area.
28. During the Inspections, DES personnel observed that TRM did not have an emergency phone posting located at the telephone nearest to the hazardous waste storage areas.

#### **D. DETERMINATION OF VIOLATIONS**

TRM has violated Env-Wm 502.01 by failing to determine if its waste is a hazardous waste.

2. TRM has violated Env-Wm 504.02(d) by failing to notify DES of changes to the information provided in their initial notification form.
3. TRM has violated Env-Wm 507.01(a)(3) by failing to close all hazardous waste containers and tanks except to add or remove waste.

4. TRM has violated Env-Wm 507.02(a) by failing to ship hazardous waste off-site within 90 days of the date when accumulation first began, except as provided in Env-Wm 508.02, Env-Wm 508.03, and Env-Wm 509.03.
5. TRM has violated Env-Wm 507.03(a)(1)a. by failing to mark each hazardous waste container and tank with the beginning accumulation date when they are first used to store hazardous waste.
6. TRM has violated Env-Wm 507.03(a)(1)b., c., and d. by failing to mark each hazardous waste container with the words "hazardous waste", words that identify the contents of the container, and the EPA or state waste number when they are first used to store hazardous waste.
7. TRM has violated Env-Wm 509.02(a)(1) by failing to conduct inspections of the Facility, including the hazardous waste storage areas.
8. TRM has violated Env-Wm 509.02(a)(2) by failing to maintain a personnel training program and to adequately train all personnel handling hazardous waste.
9. TRM has violated Env-Wm 509.02(a)(4) by failing to maintain adequate preparedness and prevention measures.
10. TRM has violated Env-Wm 509.02(a)(5) by failing to maintain a complete contingency plan at the Facility.
11. TRM has violated Env-Wm 509.02(a)(7) by failing to store hazardous waste in tanks that meet the specifications of 40 CFR 265 Subpart J – Tank Systems and comply with applicable tank standards.
12. TRM has violated Env-Wm 509.02(b) by failing to post complete emergency information at the telephone nearest to the hazardous waste storage area.

#### **E. ORDER**

Based on the above findings, DES hereby orders TRM as follows

- 1 Perform hazardous waste determinations as specified in Env-Wm 502.01 on the contents of the basement tank, and the melted remains of the 10-gallon plastic tank; and

**60 DAYS**

Submit the results along with any supporting data used to make the hazardous waste determinations to DES. Waste determined to be hazardous must be handled pursuant to the requirements of the Hazardous Waste Rules, Env-Wm 100-1100.

- |    |  |                    |
|----|--|--------------------|
| 2. | Complete and submit to DES the enclosed notification form, which must reflect the current status of TRM's hazardous waste activities at the Facility.  | <b>20 DAYS</b>     |
| 3. | Ensure that hazardous waste containers are properly sealed, and bungs or lids are closed except when wastes are actually being added to or removed from the container as specified in Env-Wm 507.01(a)(3).   | <b>IMMEDIATELY</b> |
| 4. | The Facility must arrange for and complete off-site transportation and disposal of the two (2) containers of hazardous waste that have been in storage for greater than 90 days; and<br><br>Ensure all hazardous waste is shipped off-site within 90 days of when accumulation of the waste first began, as specified in Env-Wm 507.02(a)(3), unless the waste is being accumulated in accordance with Env-Wm 509.03, the "satellite storage provision". | <b>30 DAYS</b>     |
| 5. | Ensure that all hazardous waste containers and tanks are clearly marked with the beginning date of accumulation, as specified in Env-Wm 507.03(a)(1)a.   | <b>IMMEDIATELY</b> |
| 6. | Ensure that all hazardous waste containers and tanks are clearly marked with the words "hazardous waste", words that identify the contents of the container, and the EPA or state waste number, as specified in Env-Wm 507.03(a)(1)b., c., and d.  | <b>IMMEDIATELY</b> |
| 7. | The Facility must develop and implement a general inspection program, as specified in Env-Wm 509.02(a)(1), which references 40 CFR Part 265.15, General Inspection Requirements. This program must provide for, at a minimum, weekly inspections of areas where hazardous wastes are stored.   | <b>30 DAYS</b>     |
| 8. | The Facility must develop and maintain a personnel training program as specified in Env-Wm 509.02(a)(2), which references 40 CFR 265.16, Personnel Training, including:<br><br>a. Ensure that all personnel handling hazardous waste receive annual updates of their training [40 CFR 265.16(c)]; and<br><br>b. Ensure that the following documents and records are maintained at the Facility:  | <b>60 DAYS</b>     |



1. Job title for each position at the Facility related to hazardous waste management, and the name of the employee filling each job;
  2. A written job description, including requisite skills, education and duties, for positions with hazardous waste management duties;
  3. A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position with hazardous waste management duties; and,
  4. Documentation that training has been completed
9. The Facility must ensure adequate preparedness and prevention measures are maintained at all hazardous waste storage areas, as specified in Env-Wm 509.02(a)(4), which references 40 CFR 265 Subpart C, Preparedness and Prevention, including, but not limited to, maintaining aisle space (not less than two feet) in the hazardous waste container storage areas. **IMMEDIATELY**
10. The Facility must prepare and maintain a current site specific contingency plan as specified in Env-Wm 509.02(a)(5), which references 40 CFR 265 Subpart D, Contingency Plan and Emergency Procedures, including, but not limited to: **60 DAYS**
- a. Describing the actions Facility personnel must take to adequately respond to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste [40 CFR 265.52(a)];
  - b. Listing the arrangements with local police departments, fire departments, hospitals, contractors, and state and local response teams [40 CFR 265.52(c)];
  - c. Listing names, addresses, and phone numbers of primary and alternate emergency coordinators [40 CFR 265.52(d)];
  - d. Listing all emergency equipment at the Facility, including the location, physical description, and capabilities of each item [40 CFR 265.52(e)];

- e. Describing an evacuation plan for Facility personnel including the signal to begin evacuation and primary and alternate evacuation routes [40 CFR 265.52(f)]; and
- f. Submitting copies of the contingency plan to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services [40 CFR 265.53].

The Facility must ensure the tanks used to accumulate or treat hazardous waste comply with the tank standards as specified in Env-Wm 509.02(a)(7), which references 40 CFR 265, Subpart J, Tanks, including, but not limited to:

- a. Conducting and documenting daily inspections of the tank system. **IMMEDIATELY**
  - b. Having in place spill prevention controls and overfill protection controls. **60 DAYS**
12. The Facility must ensure that a list of the steps to take in the event of an emergency are posted at the telephone nearest to each hazardous waste storage area, as specified in Env-Wm 509.02(b). **IMMEDIATELY**
13. Submit a written status report to DES within thirty-five (35) calendar days, and a second report within sixty-five (65) calendar days of receipt of this Order, certifying that corrective measures have been implemented and compliance achieved. Include in the report supporting documentation describing those measures taken to achieve compliance and copies of any written plans or proceedings developed.

Please address submittals, **other than appeals**, to:

Kenneth W. Marschner, Administrator  
DES, WMD  
6 Hazen Drive  
Concord, New Hampshire 03301

#### **F. APPEAL**

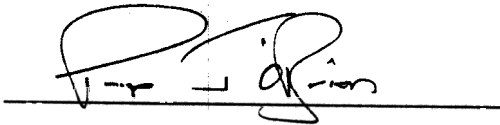
Any person aggrieved by this Order may appeal the Order to the Waste Management Council by filing an appeal that meets the requirements specified in Env-WMC 200 within 30 days of the date of this Order. Copies of the rule are available from DES's Public Information Center at (603) 271-2975 or at <http://www.des.nh.us/desadmin.htm>. Appealing the Order does not automatically relieve TRM of the obligation to comply with the Order.

**G. OTHER PROVISIONS**

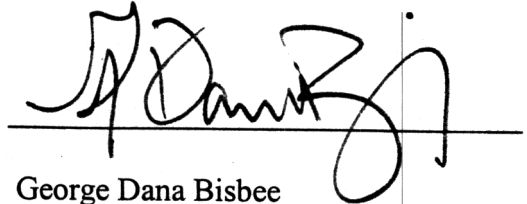
Please note that RSA Ch. 147-A provides for civil and criminal penalties and administrative fines for violations of the statute or any rule adopted by DES relative to the statute, as well as for violations of this Order. RSA 147-A:17 provides for civil forfeitures of up to \$50,000 for each day of a continuing violation, in addition to enforcement by injunctive relief.

DES will continue to monitor the compliance status of TRM to determine whether the Facility has come into, and is maintaining, full compliance with the applicable rules. Future violations will result in additional enforcement action being taken.

TRM may assert a confidentiality claim covering part or all of the information requested which constitutes a trade secret, in accordance with RSA 147-A:7, II. If no such claim accompanies the information when it is received by DES, it may be made available to the public by DES without further notice to TRM.



Philip J. O'Brien, Ph.D., Director  
Waste Management Division  
Department of Environmental Services



George Dana Bisbee  
Acting Commissioner  
Department of Environmental Services

CERTIFIED MAIL/RRR# 7099 3400 0002 9770 8061

cc: DB/RCRA/ORDER/ARCHIVE  
Gretchen Rule, Administrator, DES Legal Unit  
Public Information Coordinator, DES  
Jennifer Patterson, NHDOJ-OAG  
Town Clerk, Bedford, NH  
Michael May, TRM, Safety Officer/System Support Coordinator

e-mail: John Duclos, HWCS

enclosure: Hazardous Waste Inspection Checklist with Container Inventory  
Sample Hazardous Waste Inspection Schedule/Log  
Sample Contingency Plan Outline  
Suggested Outline for Personnel Training Records  
Sample Posting  
Notification Form